

IN THE CLAIMS:

Please amend claims 1-3 and add new claims 4-7 as follows:

1. (Currently Amended) A manufacturing method of a thin film magnetic head comprising:

~~preparing an upper~~ forming a lower magnetic core,

forming an end portion of an upper magnetic core above said lower magnetic core,

forming a rear portion of said upper magnetic core by using a negative resist or an electron beam resist to form a frame for plating above said end portion of said upper magnetic core,

covering an end portion of said upper magnetic core with a non-magnetic protective film, and

removing said non-magnetic protective film from an upper part until said upper magnetic core is exposed,

wherein a front end of a connection area in which said end portion is connected to a rear portion of said upper magnetic core is located between a face opposed to a medium and a position defining ~~the~~ a gap depth.

2. (Currently Amended) ^{the} A manufacturing method of a said thin film magnetic head according to claim 1, wherein said non-magnetic protective film is removed by a polishing process or an etch-back process using dry etching.

3. (Currently Amended) ^{the} A manufacturing method of a said thin film magnetic head according to claim 1, wherein said non-magnetic protective film is removed by using one or more kinds of gases selected from CF₄, C₄H₈, CH₃, BCl₃, Cl₂, SiCl₄, Ne, Ar, Kr, and Xe.

Please add new claims 4-7 as follows:

4. (Newly Added) ^{the} A manufacturing method of a thin film magnetic head according to claim 1,

wherein said end portion of said upper magnetic core has a first face emerging at a face _{obj}

opposed to a medium, and

wherein said rear portion of said upper magnetic core has a second face not emerging at a face opposed to the medium, which is connected to said end portion of said upper magnetic core at a position of said second face.

5. (Newly added) ^{The} A manufacturing method of said thin film magnetic head according to claim 4, wherein a distance between said first face and said second face is 0.2 to 1.5 μm .

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6. (Newly added) A manufacturing method of a thin film magnetic head comprising:
forming a lower magnetic core,
forming an end portion of an upper magnetic core above said lower magnetic core, and
forming a rear portion of said upper magnetic core by using a negative resist or an electron beam resist to form a frame for plating, above said end portion of said upper magnetic core,

wherein said end portion of said upper magnetic core has a first face emerging at a face opposed to a medium,

wherein said rear portion of said upper magnetic core has a second face not emerging at a face opposed to the medium, which is connecting to said end portion of said upper magnetic core at a position of said second face.

7. (Newly added) A manufacturing method of said thin film magnetic head according to claim 6, wherein a distance between said first face and said second face is 0.2 to 1.5 μm .
